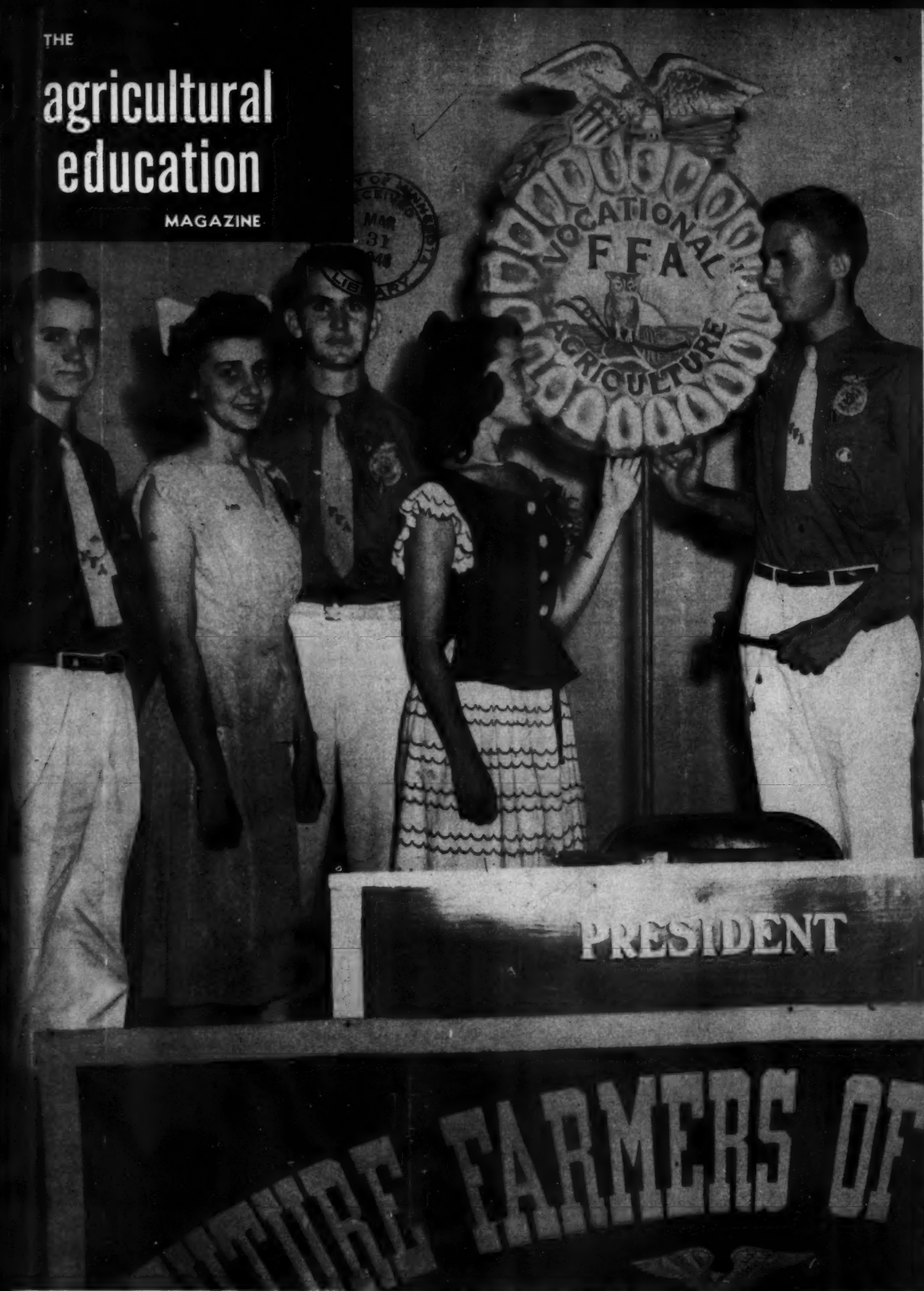


THE

# agricultural education

MAGAZINE



F.F.A. and F.H.A. officers at the North Carolina State F.F.A. convention.  
Photo J. K. Coggin

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# The Agricultural Education Magazine

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## CONTENTS

### Editorials

Planning State F. F. A. Conventions.....	H. W. Deems.....	183
Functions of State F. F. A. Contests.....	A. R. Bunker.....	183
Leadership Training Emphasized at West Virginia F. F. A. Convention.....	Sherrill D. McMillen.....	184
Annual Convention North Carolina Association.....	R. J. Peeler.....	185
Activities Oregon State F. F. A. Convention.....	Ralph L. Morgan.....	187
The Indiana F. F. A. Convention.....	K. W. Kiltz.....	188
Contests Featured at the Alabama F. F. A. Convention.....	C. C. Scarborough.....	189
Leo R. Guillaume, A Pennsylvania Teacher at Work.....	David R. McClay.....	190
Increased Learning Through the Use of Goals and Efficiency Standards in Farming Programs.....	Joe Duck.....	192
Problems and Progress in Research.....	R. W. Cline.....	194
Summary of the 1947 Research Conference North Central Region.....	Milo J. Peterson.....	195
Education — The Key to Improved Use of Electricity on the Farm.....	H. H. London and R. W. Adams.....	196

## Editorial Comment

### Planning State F. F. A. Conventions



H. W. Deems

A STATE CONVENTION of any kind is a big affair. An F.F.A. meeting on the state level should be more than a big affair; it should be a series of meetings that train for better rural leadership. It should provide an opportunity for F.F.A. representatives to discuss and plan a program of action for the good of the entire state. It should be a place where adult leaders of the state have an opportunity to observe and rub shoulders with farm lads who reach decisions on items of business, by careful analysis of facts presented, and not by the political process of "log rolling."

The state convention activities should be planned and conducted by the state officers. A detailed convention program should be made available to local chapters and delegates, well in advance of the meeting. The items of business to be transacted should be included with the program.

The convention program should be at a level suitable for high school farm boys. It should include very few, if any, speeches by adults. Talks and reports by officers and delegates should be limited to about 10 minutes each. Most sessions should include group singing or a special number. A short period of each day should be devoted to introductions. Honorable guests such as the Governor, or Dean of the Agricultural College should be asked to say just a word or two. The main part of each daytime session should be the transaction of old and new business or the giving of committee reports. Business items of least importance should be presented first. Often the best thinking delegates are hesitant to speak during the first session. The delegates should be allowed to come to their own decisions on most items of business.

Important features such as State Farmer promotion and Best Chapter awards should be given a prominent place and ample time on the program. The delegates should be allowed to hear, at least, the finals in the public speaking contest. Boys receiving Foundation Awards should be introduced and a short brief of their accomplishments read.

The election of new officers is an important item of business and ample time should be allowed for it. A nominating committee should be appointed at the first session and this committee should interview all eligible members. Major consideration in selecting candidates for an office in the state association should be given to leadership ability, farming program and experience with, and knowledge of, F.F.A. activities. In some cases it may be necessary also to consider geographical location of the F.F.A. member. It is best to have the officers well distributed over the state. More than one candidate should be selected for each office, if at all possible. If outstanding officer material is limited, two boys may be put on the ballot for president. The member receiving the most votes becomes president, the other vice-president. Another similar procedure is to select three candidates for president and vice-president. Each delegate votes for two. The boy receiving the most votes becomes president, the second high individual becomes vice-president. Ballots should be prepared. All candidates for an office should be introduced, a brief of their activities read and each should be asked to make a brief statement. As a rule, the candidates should be delegates who have taken an active part in the convention. Important committee assignments should be given to delegates holding the State Farmer degree, who have outstanding records in leadership.

Other features such as bands, banquets, shows and educational exhibits could be discussed. They add to the convention but do not make it.—H. W. DEEMS, Assistant State Supervisor, Lincoln, Nebraska.

### Functions of State F. F. A. Contests



A. R. Bunger

CONTESTS hold a conspicuous place in vocational education in agriculture and in the program of the Future Farmers of America. They attract considerable attention and are the topic of much discussion—for and against. The increased number of F.F.A. contests and their growing popularity pose a major problem which should be a matter of concern to all of us. The place of contests in the total F.F.A. program has never been clearly established and the use made of them has varied considerably within chapters and states. Therefore, if we are to acknowledge that they should be included in our activities, and if they are to be purposefully and objectively integrated then their purpose and use must be more clearly understood.

#### Outgrowth of Training

Contests should be the outgrowth of sound training programs, and should be used only as one of the means to achieve those purposes and objectives for which the F.F.A. program is designed. They are a training device and must fit into the general pattern of instruction together with other teaching aids. If the present rate of emphasis continues to be placed on contests there is extreme danger that they will become an end in themselves and will not serve as an intended means to an end. Their educational value has already begun to be dwarfed and a commercial significance is becoming apparent because of the monetary incentives to win. The glamour of contests and the glory of winning can easily and readily overshadow the training objectives of such activities. All too frequently the ultimate purposes are the awards and the publicity which they attract. Such a philosophy has no place in the program of the F.F.A. and is not compatible with the aims and purposes of our organization. Care must be exercised to eliminate and destroy those elements of F.F.A. contests which result in special training and consideration for a select few at the educational expense of the majority, and which tend to weaken those principles on which the F.F.A. is built.

If it is generally conceded that contests have a definite place in the F.F.A. program, then participation in them should be strongly encouraged. However, this encouragement must be extended to every eligible individual and not only to the few who show the best prospects for winning. We dare not lose sight of the purposes of the organization, nor should we fail to plan and develop our chapter and state contests so the opportunity to realize those purposes may be shared equally by all members. Systematic learning for the progressive establishment in farming by the individual must remain a paramount fundamental of our program if we are to retain the strong foundation on which the Future Farmers of America organization was founded.

The plan of rating teams and individuals according to a degree of quality rather than by numerical designation has eliminated one of the most serious hazards in contests. This plan is being used by many states and is the one by which our national contests are now rated. It would be desirable to have all contests from the local chapter to the national level patterned after a similar rating system. Such a system reduces to a minimum the development of undesirable interests inherent in competition, and encourages a greater consideration to the development of skills and judgment abilities by the mass of learners.

In planning and executing F.F.A. contests it is of the utmost importance that they be evaluated in terms of the purpose.

(Continued on Page 185)



# F.F.A. Conventions

## Leadership training emphasized at West Virginia F.F.A. Convention

SHERRILL D. McMILLEN, State Executive Secretary, Charleston, W. Va.



S. D. McMillen

"LEADERS are trained, not born" is the keynote taken by the West Virginia Association of Future Farmers of America in planning and conducting their annual state leadership conference and state convention. Since the F.F.A. was chartered as a state association nineteen years ago, the annual conference has been considered the climax of the year's activities. Originally, the conferences were devoted almost entirely to transacting the official business of the state association. Now we know that this conference, in addition to transacting the official business, is the foundation for our leadership training program for all chapters within our state.

The success of any conference depends upon planning and conducting all activities so that maximum experiences may be obtained by all members present.

In planning the annual convention and leadership conference held each year in August, the state executive committee meets early in the spring and arranges the program and appoints the necessary committees to conduct the conference.

### State Officers Responsible

The planning of the conference and all committee assignments are the responsibilities of the state officers, with the state adviser and executive secretary serving in an advisory capacity.

The program is planned to accomplish the following objectives:

1. Conduct the official business of the state association
2. Develop the state program of activities
3. Provide leadership training for all chapter officers
4. Stimulate interest in all state contests
5. Promote the public relations and information program sponsored by the state association

Soon after the program is planned, a copy of the program in the form of a printed invitation to attend the convention is sent to all F.F.A. chapters, honorary members and friends of the F.F.A. throughout West Virginia. All committee members are notified as to their duties during the conference and printed

programs are prepared for all state contests and special programs to be held during the convention.

The five-day state convention and leadership conference is held at the nationally known state 4-H camp located at Jackson's Mill, West Virginia. This camp provides complete facilities for meals and lodging, conference groups, recreational activities for approximately 400 people and is used by all educational groups within the state.

Three or four days prior to the opening of the state convention, the state executive committee meets at Jackson's Mill to complete final plans for the conference. At this time all delegates, state contestants, band members, State and American Farmer candidates, chapter advisers and visitors registered for the convention, are assigned to cottages and

2:15 P.M.—Preliminary Public Speaking Contest  
Preliminary Parliamentary Procedure Contest  
Placing all exhibits in exhibit hall  
Rehearsal of State Band and Glee Club

4:00 P.M.—Recreational activities  
7:30 P.M.—First Session State Convention

1. Opening ceremony
  2. Minutes of 18th Convention
  3. Old business
  4. New business
  5. Nominations for State Farmer Degree
  6. Special reports
  7. Closing ceremony
- 9:15 P.M.—Special Program of Entertainment

Saturday, August 2, 1947

8:45 A.M.—Leadership training classes organized. (All members and advisers will attend one of the following classes)

1. How to be a good presiding officer
2. How to be a good secretary
3. How to be a good treasurer
4. How to be a good reporter
5. How to be a good parliamentarian



The state 4-H Camp, located at Jackson's Hill, is used to conduct the Annual State Convention and Leadership Conference.

the camp facilities organized for all meetings and recreational activities.

The convention starts with the registration and assignment to cottages. From the time the first member arrives on Friday until the official ceremony closing the convention at noon Tuesday, the program is completely in charge of the state officers.

An outline of the program planned for the 19th Annual Convention points out the activities conducted during the conference.

Friday, August 1, 1947

9:00 A. M.—12:00 Noon—Registration and assignment to cottages

- 1:30 P.M.—Opening Session
1. Opening ceremony
2. Seating of delegates
3. Explanation of conference plans
4. Appointment of committees
5. Closing ceremony

10:30 A.M.—Second Session State Convention

1. Unfinished business
2. Special reports

11:00 A.M.—Committee meetings

1:15 P.M.—Leadership training classes

2:30 P.M.—Third Session State Convention

1. Unfinished business
2. New business
3. Committee reports
4. Special reports

3:30 P.M.—Recreation—for everyone

7:00 P.M.—Rehearsals—State Band and Glee Club

8:00 P.M.—Eighteenth Annual State F.F.A. Public Speaking Contest

9:30 P.M.—Movies

Sunday, August 3, 1947

"Visitors' Day"

8:45 A.M.—Rehearsal—State Band and Glee Club

9:45 A.M.—Morning Religious Service

11:00 A.M.—Conferring of State Farmer Degrees

# F.F.A. Contests

12:15 P.M.—Annual Banquet and Program

1. Introduction of all guests
2. Conferring of Honorary State Farmer Degrees
3. Announcement and presentation of awards:
  - a. State Star Farmer
  - b. Better Chapter Contest
4. Honorary Foundation Donors
5. Guest Speakers
- 3:00 P.M.—Recreational Program
- 7:00 P.M.—Vesper Service
- 8:00 P.M.—Finals—State Parliamentary Procedure Contest
- Amateur Contest
- Presentation of awards

Monday, August 4, 1947

- 9:00 A.M.—Leadership training classes
- 10:30 A.M.—Fourth Session State Convention
- 1:15 P.M.—Leadership training classes
- 2:15 P.M.—Fifth Session State Convention
- 3:15 P.M.—Recreational Program
- 8:00 P.M.—Special Program—Sponsored by the Farm Electrification Council of West Virginia  
A program devoted to informing the F.F.A. about the progress of Farm Electrification in West Virginia.
- 9:00 P.M. - 9:30 P.M.—Radio broadcast direct from the convention over West Virginia stations.
- 10:00 P.M.—F.F.A. party by Farm Electrification Council

Tuesday, August 5, 1947

- 8:30 A.M.—Final leadership training class
- 9:45 A.M.—Final Session State Convention
1. Approve State Program of Activities
2. Approve budget
3. Unfinished business
4. Election of officers

11:00 A.M.—Joint meeting, retiring and incoming officers

1:30 P.M.—Meeting of State F.F.A. Executive Committee.

Leadership training, official business of the state association, planned recreational and social activities, state contests and exhibits are all used to give the F.F.A. members, advisers and guests the maximum amount of individual participation in the conference.

## State Leaders Participate

Each day of the convention features one or more activities that will bring outstanding state leaders to the conference to participate in the program. Judges for all contests are selected to bring representatives of state agricultural organizations, state government, county superintendents of schools, high school principals and others to the convention. As an example of this, two county superintendents of schools, the state supervisor of high schools, director of vocational education, state boys' 4-H club agent, head of the department of rural organization—West Virginia university, and the president of the state senate served as judges for the public speaking and parliamentary procedure contests.

Visitors' day is always planned as the highlight of the convention. All former F.F.A. members, past state officers, parents of F.F.A. members and guests are invited to spend Sunday with the Future Farmers of America at their state convention. At the past state convention, several hundred guests visited the camp on Visitors' Day.

The governor of West Virginia, state superintendent of schools, commis-

sioner of agriculture, dean of the college of agriculture, representatives of the extension service, 4-H clubs, Farm Bureau, Grange, Future Homemakers of American and business organizations were present to participate in the activities.

Sixteen past state officers attended the convention and the group organized the "West Virginia Past F.F.A. Officers' Club." This organization will meet each year at the annual convention to assist the association in any way possible.

The program for Monday evening was sponsored by the West Virginia Farm Electrification Council. This organization, devoted to developing the use of electricity on the farms, is made up of representatives of all agricultural agencies and electrical power companies operating in the State of West Virginia.

Each year some agricultural organization is invited to participate in the program as part of the public relations and information program sponsored by the state association.

Five days are devoted to leadership training and conducting the business of the state association. The program is conducted to give all individuals present a maximum of experience that will enable them to combine the leadership training program and F.F.A. activities in their local federations and chapters.

## Functions of state contests

(Continued from Page 183)

poses which they are intended to achieve, and in terms of educational and training opportunities which they afford to the members. If it can be determined that contests are being used as a device to help attain our established training objectives, if by their use we are developing skills and the ability to render good judgment, if through them we are instilling ideals and fixing healthy attitudes, they are desirable and a definite place should be provided for them; and if the opportunity to participate in them is equally available to all of the members then we can justify the time and effort which contests demand.—A. R. BUNGER, State Supervisor, Denver, Colorado.

A series of monthly radio broadcasts over KOB Albuquerque are being given by 12 F.F.A. chapters in New Mexico.

Three workers in the field of agricultural education in Oregon have been awarded keys for a minimum of 25 years of service in vocational agriculture. The recipients are H. H. Gibson, Professor of Agricultural Education at Oregon State College, Ralph L. Morgan, State Supervisor of Agricultural Education, and Homer Grow, Instructor at Roseburg.



Exhibits of agricultural products, chapter exhibits, winning record books, secretaries' books, treasurers' books and scrap books are featured in the exhibits at the Annual State Convention and Leadership Conference.

## Annual Convention North Carolina Association

R. J. PEELER, State Executive Secretary, Raleigh, North Carolina



R. J. Peeler

**E**VERYTHING worthwhile must have a purpose. And so it is with the annual convention of the North Carolina Future Farmers of America, for theirs is a purpose that goes beyond the routine of business and the regular scheduled program of events.

The Tar Heel F.F.A.'s convene once a year in Raleigh ostensibly to check the past year's accomplishments and to charter a course of action for the year to come. However, there are underlying purposes of such a gathering which are based on the solid principles of leadership training for today's farm youth.

The objective of this meeting, therefore, could be classified as threefold: to inspire the boys and their teachers to make a constant effort to improve all phases of work, to increase enthusiasm of not only the group but the individual, and to further interest in F.F.A. work.

### Conducted by the Members

The convention itself is conducted entirely by the boys. Behind the scenes, however, the staff members and teachers have laid the foundation by furnishing, to a large extent, the necessary inspiration, information and guidance. They have advised and instructed at previous meetings within their own chapters and during the convention proper are always on hand for further consultation if such is necessary.

The organization of the convention is no small matter and is carried on with the skill and efficiency of F.F.A. leaders throughout the State. The first step lies in canvassing all local chapters relative to changes in the F.F.A. program. The F.F.A. advisory committee then meets to consider all recommended changes and to add any additional recommendations which the committee feels will further the improvement of certain phases of the F.F.A. program.

A three-day joint meeting of the F.F.A. executive committee and the state F.F.A. advisory council is held in order to plan the convention program and to discuss the pros and cons of each item of business to be handled by the official delegates. This group votes on every item that comes up so that each individual may see how the other members of the group feel. However, they do not have the power to pass or veto any item that may arise. Regardless of how the majority feels, this item will go before the convention committee. One or more members of this group serves on each committee appointed during the convention, and since they know the feelings of their fellow committee-members, they can readily advise as to whether or not

an item warrants further consideration on the floor.

Three days prior to the convention the state F.F.A. executive committee meets to discuss all phases of the convention program. Members of this committee are designated to perform certain duties and responsibilities during the convention, such as introducing the speakers, serving as parliamentarian, welcoming guests, and serving as "safety man" whose responsibility it is to see that action taken on various items of business is in complete accord with the high ideals and purposes of the F.F.A.

This committee also reviews applications for the State Farmer Degree and spends the remainder of the three-day period on various leadership training activities to be put into practice during the convention. They appoint one staff member, two local F.F.A. advisers and from three to five outstanding F.F.A. boys to serve on each of the 10-12 committees, and then outline the duties and responsibilities of each committee, at the same time providing a folder containing helpful information.

These convention committees meet promptly following the first general session of the convention proper to take action on various items of business submitted to them. Each committee has the authority to revise, eliminate or add any item it sees fit. Their reports are presented on the convention floor during the second or third day for final consideration and action by the delegates.

### Talks, Business, Contests

Actually the convention could be divided into three parts, an equal amount of time being spent on each of the three—inspirational talks, business and state elimination in contests. Speakers include political and agricultural leaders throughout the state. The contests are those that were begun within the 380

local chapters, and through the process of elimination have gone through the 42 federations and five districts. The district winners participate during the convention for state honors and a total of about \$8,000 is awarded in cash prizes in order to stimulate interest.

All official F.F.A. supplies are on sale at cost price during the convention, such as degree pins, manuals, secretary and treasurer's books, scrap books and wearing apparel. Soon after the convention is over, a summary of all business transactions and other items of interest is prepared by the state office and mailed to every chapter.

Last year's convention was a typical one, being held in Raleigh at the Sir Walter Hotel, July 8-10. To even the most casual observer this three-day meet was the scene of thriving activity, the enthusiasm and interest of those attending being evident at all times.

### Four Sessions

It was divided into four sessions and featured such prominent speakers as Governor R. Gregg Cherry, State Superintendent of Public Instruction Clyde A. Erwin, M. G. Mann, general manager of Cotton Cooperative, and others.

During the convention a full report was given concerning the outstanding record made by the N. C. Future Farmers during the past school year. It was learned that the active membership was increased from 10,005 to 12,008, which brings the entire membership in the state, including active, associate and honorary members, up to 25,000. To top their list of accomplishments, they chalked up a labor income of \$1,866,140 from project work. This included a total of 312,408 layers for eggs, 807,642 broilers for meat, 18,376 hogs for pork, 7,852 brood sows, 10,812 home gardens, 18,406 acres of legumes and many other projects.

The report also brought out the fact that over 9,000 boys out of the 12,000 active members had a four-year plan in operation. This plan is adopted by every boy at the beginning of his high school years and includes the keeping of official

(Continued on Page 187)



Rufus Warren, center, State winner in the Forestry Contest receiving award from J. Warren Smith, State Director of Vocational Education. Standing between these two is C. M. Butler, Warren's teacher and local FFA Adviser and to his left is Bob Hoskins, Industrial Forester for the Seaboard Railway and on the extreme left is W. K. Beichler, State Forester of North Carolina.



## Activities Oregon State F.F.A. Convention

RALPH L. MORGAN, State Adviser, Salem



Ralph L. Morgan

war years was 400.

Convention meetings competed for interest with the numerous contests and demonstrations put on during the week. Among the contests were dairy and live-stock judging, grafting and budding, seed identification, grain judging, farm accounting, poultry judging, general demonstrations, project demonstrations, farm mechanics demonstrations, tractor driving, hog calling and others.

In addition, organized tours of the various agricultural departments of the college kept the boys occupied. The college swimming tank was available to Future Farmers exclusively. Movie houses scheduled special shows, and a college baseball game was usually available on Saturday afternoon. Dormitories and fraternities housed and fed the group.

This "old time" convention is practically unknown to the present generation of F.F.A. boys. During the war streamlining was necessary and due to restrictions on travel and meetings, conventions were limited first to a single delegate per chapter and later to two delegates each. Three of these meetings were held at the Imperial Hotel in Portland. Then a somewhat larger meeting was tried at the State Capitol Building, Salem. These Portland and Salem meetings culminating in the annual banquet

on the last evening, were principally devoted to business. Practically all of those present were delegates and the result was a greater emphasis on business of the state association. There was little time in these two-day affairs for recreational activities. Tours were enjoyed when possible, and one night was devoted to the finals of the state parliamentary contest, followed by a fun night with amateur acts put on by various chapters.

Because of crowded conditions at the college, for the first time in history the expanded convention last year was taken east of the mountains to Pendleton, "The Round-Up City," with an attendance of approximately 350. The city got behind the convention in a very fine way and the result was a most educational convention. Tours were conducted to stock ranches, large wheat farms, state institutions, and large elevators, which were all new to the boys from western and southern Oregon.

Awards were made to winners of the state parliamentary contest, and to individual winners of fun night activities. Pennants were also awarded winners of the new project book contest, and to the chapters having the best secretary's and treasurer's books. Awards were also given for the best general demonstrations.

### Use Facilities at State Vocational School

The 1948 convention will be at the newly organized Oregon Vocational School at Klamath Falls, in the southern part of the state. Here facilities are almost unlimited for sleeping and eating at the school, with an estimated 800 boys planning to attend. A former Marine Recuperational Barracks, the school is ideal for a large group, having a huge 80' x 160' swimming pool, a large bowling alley, a complete gymnasium and a theater seating 1,300 persons. A recreation chairman will supervise the organization of various teams.

Contests planned include a dairy judging contest, to pick the Oregon team to go to Waterloo, Iowa, next fall, tool identification, seed judging, farm mathematics, secretary's and treasurer's book contest, project book contests, and demonstrations. The convention will be for three full days, April 8, 9, and 10, with tours through Tule Lake wild bird refuge; the Modoc Lava Beds; and Indian cave country of northern California; and the famous Klamath Basin that raises 10 million dollars' worth of potatoes each year. Barley and beef are also there in abundance.

The state executive committee, consisting of the 5 student officers; Mr. Morgan, state adviser; the 6 district F.F.A. vice-presidents, and the 6 instructor members of the advisory council will meet 2 or 3 days previous to the convention. They will lay final convention plans, interview prospective state farmers, pick the winners of the state Keystone chapter contest, and the Oregon Star Farmer and perform other necessary duties. Eugene Hansen of Garland, Utah, national F.F.A. student secretary, is an invited guest to the 1948 convention. Robert Taylor, past national 1st vice-president of Grants Pass, will also be a guest.

We feel from the standpoint of our state organization, that we have strengthened our program during the war years. Our emphasis has been placed on better meetings and conducting our business with dispatch. We hope that the gains made in this line will not be lost, when we again take up the round of contests and tours that seem to be necessary when large groups are involved. We want all the boys to have a good time, but included in their report to the chapter should be a vivid description of the state association at work.

We firmly believe that a state convention should be an example to local chapters. The meetings should be so handled, and the banquet so arranged that the representatives from each chapter will take home ideas that will build stronger local programs. Our conventions are run by the boys for the boys, and every Future Farmer in the state hopes to attend at least one during his high school career.

### North Carolina Convention

(Continued from Page 186)

project record books to be followed and enlarged upon as he progresses through school. Cooperative buying and selling are important items within the chapters, and it was found that over \$76,000 was spent in the purchase of such articles as fruit trees, fertilizer, baby chicks and the like.

Having always stressed the importance of scholarship, the F.F.A. is proud of the record made last year. Over 6,100 members made an average of 80 or more on all high school subjects, and 287 chapters had an approved F.F.A. library. Recreational activities in North Carolina have been extensive, and last year over 4,000 boys were in attendance at the two summer camps owned by the F.F.A. Association.

The Effingham, Kansas, F.F.A. chapter realized a net profit of \$415 from a stand at the 1947 County Fair.



Kenneth Logan of Hillsboro, state FFA treasurer, presents his officer's report to the delegates at the streamlined Oregon State Convention at the Imperial Hotel, Portland.

# The Indiana F.F.A. Convention

K. W. KILTZ, State Executive Secretary, Lafayette, Indiana



K. W. Kiltz

**T**HE INDIANA F.F.A. Association was organized in 1929. It was the nineteenth state association to be chartered. The first state convention of the association was held at Purdue University in October, 1929. The Indiana association will hold its nineteenth convention

at Purdue University in April, 1948.

The basic philosophy underlying the Indiana F.F.A. conventions is that the convention is to be considered primarily as a congress at which the state officers and the delegates from the various chapters are to participate in committee work and in business sessions to determine and plan desirable state-wide F.F.A. activities. The individual chapters are then expected to add to the framework of proposed activities and to make detailed plans for chapter achievement.

In addition to planning for the future some time is used during the convention for a review of activities of the past year of the local chapters, and of the twelve F.F.A. districts of the state. This review is considered to be valuable in suggesting to members of the less active chapters activities that might be incorporated in their programs. The review of activities also is thought to have value as a method for making a general check on F.F.A. performance in the state and for determining activities that should receive greater emphasis and activities that should be discontinued because they deviate from true F.F.A. objectives or from sound educational principles.

## 1947 Convention

A brief review of the 1947 Indiana F.F.A. convention program may serve to illustrate and emphasize the statements that have just been made. The convention ran from 9:30 A. M. on Thursday, April 3, to noon on Saturday, April 5. The hours from 9:30 A. M. to noon on Thursday were used for a meeting of the state F.F.A. executive committee in which the conduct of the convention and the policies of the association were discussed. The executive committee includes the state officers and the directors of the twelve F.F.A. districts of the state.

Thursday afternoon of the convention was devoted to reports by each of the state officers and district directors on F.F.A. achievements in their respective spheres since the last convention. Reports were also given by a delegate who had attended the 1946 national convention, by a delegate who had participated in the Prairie Farmer-WLS Four-State F.F.A. Award Trip and by delegates who had attended state F.F.A. camps in Ohio and Missouri. Such reports are of interest to the convention audience and help to develop new conceptions in the thinking of convention delegates about the activities and values of F.F.A. The afternoon meeting also included a business session and some entertainment.

The Friday morning session of the convention consisted of approximately two hours of work by committees. The members of these committees had been assigned to their committees several weeks before the convention with the thought that they could advise with their home chapters on the material to be developed by the committee. In most cases, district directors served as committee chairmen. State officers and local advisers were distributed to different committees with instructions to advise with the committee members but not to dominate the thinking of the members.

About one hour on Friday morning was used for district meetings. At these meetings new district directors were elected and some plans were made for the district program of work for the coming year.

The session on Friday afternoon was devoted to addresses by Philip Shober, national student secretary, and by Wayne Guthrie, City Editor of the *Indianapolis News*. A short business session and entertainment completed the afternoon session.

## Banquet Session

The convention banquet session was held on Friday evening. The highlights of this session were the finals of the public speaking contest, a joint ceremony with the state officers of F.H.A., a memorial to F.F.A. war veterans, and the presentation of F.F.A. contest awards.

On Saturday morning the state F.F.A. executive committee, including both old and new district directors, used two hours to interview candidates who had been nominated by local chapters for state F.F.A. offices. A general session followed these interviews during which the committees made their reports. Copies of these reports had been mimeographed and these copies were distributed to the delegates. This procedure resulted in a faster and more effective consideration of the reports and also made immediately available to the delegates materials for use with their home chapters. The Saturday morning session also included the initiation of State Farmers and an analysis of the applications that had been submitted for the degree. This analysis was given by a member of the State Farmer Degree Selection Committee and was designed to be helpful to future aspirants for the degree.

The election of officers, the installation of the new officers, short talks by the retiring officers, a brief business session and some entertainment completed the convention program.

In this sketchy review of the eighteenth Indiana F.F.A. convention many details have been omitted. However, it is hoped that the review emphasizes and illustrates the point that the Indiana convention is primarily a meeting to appraise achievements and to plan for the future with extensive participation in the entire procedure by the F.F.A. membership.

Mention has been made of the presentation of contest awards at the banquet session on Friday evening. Perhaps some comments about a few of the Indiana contests would be of interest to the reader. The principal Indiana F.F.A. contests include public speaking, essay, secretary's book, treasurer's book, chapter reporters, news letter, chapter, local chapter project and farm safety contests that culminate at the convention. In addition to these contests, the association, later in the year, selects a dairy judging team and a livestock judging team to compete in national contests. Most of these contests appear in F.F.A. programs in various states and some of them are defined by the national organization. No comments will be made about contests of this type. However, because it is believed that the essay, chapter reporters and news letter contests may be somewhat unique to Indiana, a brief description of each of these contests follows.

## Essay Contest

The essay contest was planned for F.F.A. members who are not interested in expressing themselves through the medium of the public speaking contest. The essay contest subject must be on some phase of agriculture of national interest and the essay must not exceed twelve hundred words. A winning essay is selected in a local chapter contest. This essay is entered in a district contest. The essays that are placed first in each of the twelve districts of the state are eligible for entry in the state contest. The essays are judged with the use of the following score card:

### A. Content of the essay—

1. Importance and appropriateness of subject .....	15
2. Suitability of material used .....	15
3. Accuracy of statements included .....	10
4. Evidence of purpose .....	10
Total on content .....	50

### B. Composition of the essay—

1. Organization of the content .....	15
2. Unity of thought .....	10
3. Logical development .....	10
4. Use of English .....	10
5. Spelling .....	5
Total on composition .....	50
Total possible score .....	100

The winning essays in the state contest are usually published in one of the state farm magazines and in state F.F.A. and vocational agriculture publications. The value of the contest lies in the training that it offers in concise, logical expression and in assembling and assimilating information about the subject used.

The chapters reporters contest was planned to stimulate local chapters to inform the persons of their communities about F.F.A. and vocational agriculture. Participation in the activity by the chapter reporter also has considerable educational value for him. All chapter reporters are eligible to compete in district contests. Two winners are selected from each district to compete in the state contest. The contest entry consists of a scrapbook of materials. The book may contain any article that the chapter reporter has prepared and had published or any article that the members of the chapter may have prepared and had published or any article published, the material for which was furnished by the reporter or



by members of his chapter. These articles must have been published during the year between state conventions. All clippings must be accompanied by the date line and the name of the paper or magazine in which they were published. Scripts given over radio stations, with the date given and the name of the station indicated, may form a part of the book. Published pictures may be included in the entry if they are properly labelled. The articles and news items and pictures must deal with activities of the F.F.A. and the name F.F.A. or Future Farmers of America is expected to appear on every clipping.

### News Letter Contest

The news letter contest is planned to stimulate greater interest in F.F.A. members in local chapter, district, state and national F.F.A. activities. The letter also serves as a medium for the exchange of ideas. It affords an opportunity for F.F.A. members to express ideas in an organized manner. The planning of the news letter, the organization of the materials, the plans for financing and publishing it represent a cooperative endeavor that has considerable training value. The news letter can also be used to promote greater understanding in the community about F.F.A.

The rules of the contest provide that the news letters may be published and distributed by a local chapter as a chapter activity or they may be published as district news letters with different issues sponsored by different local chapters. Two winning news letters are selected in district contests in each district for entry in the state contest. In judging the news letter contest the judges consider the following points:

1. General appearance of the news letter
2. Appropriateness of material
3. Arrangement of material
4. Quality of writing
  - a. Correctness of English and sentence structure
  - b. Paragraphing
  - c. Punctuation
  - d. Spelling
  - e. Forcefulness of expression
  - f. Ease of reading
  - g. Significance of content

## Contests featured at the Alabama F.F.A. Convention

C. C. SCARBOROUGH, State Executive Secretary, Auburn

THE Alabama Association of F.F.A. has held 18 annual conventions. Time spent at the conventions has varied from the one-day business sessions of the war years with limited attendance, to a four-day convention with a total of more than 1,000 members from the chapters in the state. Of course, the convention program has varied accordingly. However, highlighting most of these conventions has been the state-sponsored contests. The oldest of these contests and still one of the leading ones is the speaking contest. Several years ago, the quartet contest was added and is conducted along with the speaking contest. It has added interest and entertainment to the program. The string band contest likewise meets approval and at the same time adds needed music for the program. More will be told about how these contests are handled at the convention.

Since the F.F.A. Foundation funds have been made available more contests have been added to the F.F.A. program in Alabama. Many of the finals for these contests are held at the convention. Others are announced at that time. For example, the Star Farmer award is announced and made at the convention when the State Farmer certificates are awarded other candidates. Likewise, the winners of the forestry awards are announced and recognized at the convention. Perhaps a report on the last convention program will show more clearly how these contests become a part of the convention.

### Two-day Convention

Alabama's 1947 convention was limited to a two-day session because of the housing situation. The opening session was devoted to organization of the convention, seating of house of delegates (two from each chapter), welcome address and response, and other routine matters. Music was furnished by three of the F.F.A. chapter string bands competing for state honors. Although they were playing at different times as needed in

the program, they were being judged. The same thing was true with the radio program demonstrations by two other F.F.A. chapters. This is one of our state-sponsored contests designed to give chapters help in planning and giving local radio programs. The contests proved to be interesting and entertaining. They gave each chapter a chance to present highlights of the year's activities and show musical talent as well.

### Night Session

The second session was at night and devoted to conferring of State Farmer Degrees and other special awards. The special awards included Star Farmer, Farm Mechanics, Farm and Home Electrification, Green Hand Farmer, and National Chapter Contest winner for Alabama. Again, the music was furnished by two of the F.F.A. string bands competing for state honors.

The morning session was devoted to special activities by groups. The nominating committee interviewed candidates for state offices. Livestock judging was being conducted with entries in beef cattle and dairy cattle judging. These contests are also a part of the state program. At the same time the chapters having entries in the parliamentary procedure contest were holding their first eliminations. While all this was going on, there was a tour of the convention city being conducted for those Future Farmers not in the activities mentioned. Incidentally, it is thought that there was some overlapping in this program which should be eliminated next year if time permits.

The third general session was again largely a business session with such matters as reading and adoption of the state activity program and election of new state officers taking most of the time. Again, the string bands and radio program demonstrations furnished entertainment for the delegates. At this session, the state winner in the parliamentary procedure contest gave a demonstration for the benefit of all delegates and other Future Farmers present. Officer reports concluded this afternoon session.

The final general session of the convention featured the finals in the public speaking contest, an address by the national F.F.A. vice-president for the region and a talk by the state president of Future Homemakers. Music was furnished by the state winner of the string band contest, and the quartet contestants with the speaking finals. The awards for the other state contests not previously made were given at this session. Installation of new officers and presentation of past officer pins closed Alabama's 18th State F.F.A. Convention.

Our own evaluation of such a convention program might be timely. It varies from the usual convention program in that no adults made speeches and none appeared on the program other than in a routine way. This departure may be too great; perhaps our boys would have

(Continued on Page 191)



Officers of the Indiana Association: Ervin Martin, President; Ralph Smith, Vice-President; Roger Jessup, Secretary; Floyd Riggs, Reporter.

## Professional

S. S. SUTHERLAND

B. C. LAWSON

### Leo R. Guillaume, a Pennsylvania teacher at work

DAVID R. McCLAY, Teacher Education, The Pennsylvania State College, State College, Pa.



David R. McClay

**F**EW teachers in vocational education in agriculture have a record of accomplishments like that of Leo R. Guillaume, teacher of vocational agriculture at Troy High School, Troy, Pennsylvania. He started teaching at Troy in the fall of 1913 and has been

teaching vocational agriculture in this same school continuously since that time. In June 1948, Mr. Guillaume plans to retire from teaching and spend his well-earned leisure growing flowers in the small greenhouse which adjoins his home.

#### Accomplishments

Let us examine some of the accomplishments that he has helped the Troy community make during the past 35 years.

1. A total of 450 young men have had two or more years of instruction in vocational agriculture under this teacher. Approximately 300 of these young men are now either farming or are in occupations closely related to farming. Eight sons of former students have received instruction from Mr. Guillaume. Fifty-five former students are now farming in partnership with their dads.
2. Eight of his students have received the American Farmer degree.
3. Forty-six state or Keystone Farmer degrees have been awarded to students of vocational agriculture from Troy.
4. Mr. Guillaume's department has won the state-wide project contest 7 times, placed second 5 times and has never been below 3rd in the 20 years that the contest has been held.
5. In his 35 years at Troy, Mr. Guillaume has had many boys earn places on state judging teams and has had several boys participate in the Keystone F.F.A. band.

Troy is a town of 1200 population located in the somewhat mountainous area that makes up north central Pennsylvania. It is largely a dairying community. The Troy high school draws students from approximately 400 square miles, making up twelve townships. The senior high school has an enrollment of 475. The department of vocational agriculture has 55 boys enrolled.

The physical facilities at Troy include an agriculture classroom which is very

The story about Mr. Leo R. Guillaume, instructor of vocational agriculture at Troy, Pennsylvania, is the first of several reports pertaining to *Teachers at Work*. The articles are being run in sequence to the series of contributions which appeared previously in the Professional Section under the caption, *Role of Vocational Education in Farming*.

complete with ample storage, cupboards, bulletin files, magazine rack and is equipped with heavy oak tables and individual chairs. The farm-mechanics shop is quite modern and contains the necessary power tools usually found in agriculture shops. It has an ample supply of hand tools, well kept and well stored in a tool cupboard. A second teacher of vocational agriculture assists Mr. Guillaume in the program. The assistant teaches all the farm mechanics and two classes of the other work.

Mr. Guillaume feels that his strong point is the supervised farming program phase of his work. He visits each potential agriculture student prior to the boy's enrollment in the high school. At this initial meeting, he discusses with the boy and the boy's parents the course in vocational agriculture and the home supervised farming program. Before this teacher leaves, both boy and parents know what is expected of them and what to expect when the son enrolls in vocational agriculture. The boy's supervised farming program is, therefore, decided before the boy reports to the high school in September. Mr. Guillaume does not encourage junior projects and will only allow a boy to conduct a junior project if he suggests it and is quite anxious to carry it out.

#### Farming Programs

Mr. Guillaume prefers that each boy select a supervised farming program that will produce an income during the first year. He feels that this income does a lot to boost the boy's morale, increase his interest and make him hopeful for the future. Take, for example, one of the students who was recently awarded the American Farmer degree. Some eight years ago, Mr. Guillaume visited this boy on his home farm and talked to the boy and his parents. The boy thus far did not own anything except the clothes he had on his back. The father was encouraged to sell one of his cows to the boy. The boy borrowed the money from a local

bank, with his father "going on his note." The boy had full responsibility for this cow. From the production of the cow during the first six months, he paid for the animal and for her feed. He then borrowed additional money and bought a second purebred cow. With the income from the two cows, he soon paid the bank off and has been expanding his program for some eight years. When this young man was graduated from high school he owned 14 head of dairy cattle. He now has over 30 head of purebred Jerseys, owns a \$1500 tractor and considerable other farm equipment. Now, three years after graduation from high school, this young man is well established in farming and plans to be married in the near future.

During the school year, each freshman and sophomore boy receives at least two periods weekly of instruction on his supervised farming program. During this time, his problems are ironed out and he is made familiar with the record book and his entries are checked for accuracy and completeness to date. The boy is given special reading assignments concerning his supervised farming program, to provide the information he will need. During the school year, Mr. Guillaume visits the supervised farming programs of his boys as often as he can be of assistance to them.

In the opinion of Mr. Guillaume, the supervised farming program is the best means for the boy to find himself. His boys all have 100 per cent ownership in their farming programs. They have full responsibility and he insists upon this full responsibility. The "sink or swim" method of teaching is important to the boy in that it makes for better learning, builds self-confidence, and increases boy's interest.

It is interesting to examine a summary report of the supervised farming programs of Mr. Guillaume's boys. The 1946-47 report is shown on page 191.

#### Course of Study

The course in vocational agriculture at Troy is organized in such a way that the freshman year is pretty much exploratory and the cross-section method of organization is employed. During the remaining three years, subject matter is taught as complete courses, with both Mr. Guillaume and his assistant assuming this responsibility.

During World War II, farm machinery repair courses were in almost continuous operation in the farm mechanics shop at Troy for farmers of the community. Previous to World War II, evening classes were taught in dairying for farmers and plans are being made to start these classes again in the near future.

Since 1913, Mr. Guillaume has taken an active part in civic affairs of the community. He is a faithful church member and has supported all local activities. He has not made a practice of seeking the leadership in local activities but has always willingly supported these activities when called upon to do so. He feels that he is employed to teach young men—the future citizens of the community—and that this is his foremost responsibility. If he should give much of his time to community activities, this would limit what he could do on his regular job.

## SUMMARY OF SUPERVISED FARMING PROGRAM, 1946-47

Project	Projects Completed	Scope	Labor Income
Corn .....	11	36 Acres	\$ 1,270.85
Dairy .....	30	56 Cows	21,405.87
		32 Calves	
Home Improvement.....	24	Farm and Home	
Truck .....	1	$\frac{1}{4}$ Acre	11.33
Poultry .....	10	490 Hens	3,150.78
		3,025 Chicks	
Sheep .....	2	12 Ewes	134.79
Small Grains .....	2	16 Acres	172.39
Number of pupils completing one project .....	10	Number of pupils enrolled for projects .....	43
Number of pupils completing two projects .....	16	Number of pupils completing projects .....	38
Number of pupils completing three or more projects.....	12	Number of pupils failing to complete projects .....	5

The Troy Chapter of Future Farmers of America was one of the pioneer chapters of Pennsylvania. It has always been strong and active. At the present time, meetings are held weekly and these meetings are attended by all members. This year there are fifty members in the active chapter out of the fifty-five boys enrolled in vocational agriculture. Membership in the F.F.A. is voluntary and Mr. Guillaume feels that to compel all boys to join is a mistake. He believes that it is a rare department that does not have a few "trouble makers" in it and these boys can do a lot of harm to the F.F.A.

### Some Advice to Prospective Teachers

It is believed that a teacher with 35 years of successful teaching in agricultural education can offer to those about to engage in the profession much helpful advice. Below are a few suggestions that Mr. Guillaume offers to neophytes:

1. A good background of farm experience and farm living is important. If the prospective teacher does not have this, he should obtain it as soon as possible.

2. Be thoroughly *community minded*—be a part of the community. The community in which you are to teach is your

community. Assume that you will be there for a long time, not temporarily.

3. Keep the local community in mind in all your teaching. Remember your job is to make your local community better.

Remember, there is a lot of carry-over in your teaching, i.e., fathers and neighbors learn from your students. Make use of them in your teaching and by all means, make your teaching practical.

5. Beware of false teachings and part-truths.

6. When asked a question that you cannot answer, admit your ignorance—do not bluff. Inform the inquirer that you will do your best to find out.

7. Keep in close touch with your former students. You can learn much from them. Your program should be adjusted and changed to meet the present day needs as shown by the experiences of former students.

8. A strong supervised farming program is the most important phase of your job. I have seen the effect of a boy's supervised farming program on farms all along a road in a section of the community. A good supervised farming program is contagious.

9. Be careful not to antagonize farmers. You should listen plenty and speak

little until you are well established. Your first few months' teaching is a probationary period. Wait until you are generally accepted before making drastic changes in your department.

10. Recognize and commend the good work of farmers or adults. This is one of the best ways of getting the good will of the farmers of the community. Without this good will, a teacher of vocational agriculture is helpless.

11. Don't allow your enthusiasm for your work to diminish as you grow older. If anything, keep it increasing through the years.

12. Teach pupils, not enterprises or skills.

13. Make your teaching personal.

14. The strong teacher doesn't need a text book, although text books are quite useful. Don't become a text book teacher.

15. Keep your students interested. A method of arousing interest that has worked for me has been accepting only top quality work. This holding to high standards gives the boys pride, appreciation for good work and a desire to improve.

### The Future of Vocational Education in Agriculture

This can best be told in Mr. Guillaume's own words.

"Our program has just nicely started. Until recent years, we in vocational education in agriculture have had a selling job to do. Our job was to educate the public. Our job was pretty much exploratory in nature. I feel now we are well established and we should continue to grow in the future. The service that a teacher can give to the community is limitless. No one single individual can do as much to improve the way of life of rural people as can be done by the teacher of vocational agriculture."

### Alabama Convention

(Continued from Page 189)

gained inspiration from addresses from successful men. It was a matter of choice, since our time was so limited. After discussing the matter with the state F.F.A. executive committee the program outlined above was decided upon. It is interesting to note that in a recent questionnaire sent to all F.F.A. chapters asking for suggestions for the 1948 convention, there seems to be no demand to go back to a "speech-making" convention!

Dr. W. A. Broyles, Professor Emeritus in Agricultural Education at Pennsylvania State College, has accepted a temporary appointment at the University of Athens, Greece. He will serve as counsellor to the Greek Government on agricultural education problems and will direct the establishment of a department of agricultural education at the University.

The F.F.A. chapter at Chester, Vermont, has adopted two French students whose names were secured from American Aid to France, Incorporated. Boxes containing such items as food, paper, and school supplies are mailed to the students each month.



Leo R. Guillaume and chapter officers receiving the first place award in the Pennsylvania State Project Contest from V. A. Martin, State Adviser.



## Methods and Materials

W. A. SMITH

# Increased learning through the use of goals and efficiency standards in farming programs

JOE DUCK, Teacher Education, University of Missouri, Columbia



Joe Duck

**A** BEGINNING has been made in Missouri in the improvement of learning through the increased use of goals and efficiency standards in farming programs, a process that has "squeezed the water" out of project accounting. To reach this objective it was necessary

for the teacher to take only three steps not used before: (1) guide each student in the setting up of goals and efficiency standards for each of his production projects, (2) teach each student to analyze his completed projects for efficiency, and (3) compare the analysis of each completed project with all other student projects of the same type and with "official" standards.

### What Teachers Say About It

Before telling you how some teachers have increased the effectiveness of their teaching through the use of project analyses, listen to what they say about the subject. William Day at Washington says: "I have found that analyses have reduced our *labor income* rather than increased it because the students are more careful about accounts. - - The students learn more from these records than from books. - - A study of the records is worth more than several hours' lecture or discussion on what some unknown person or persons did." Oral Barrow, supervising teacher at Rogersville, wrote: "Better records are kept by the student when he knows that his analyses will be placed on a chart with those of other students for all to see." Maxwell Lampo of Carl Junction asserted: "I have found that the comparison of analyses has been most effective in selling the parents on the value and the need of farming programs for their sons. - - I used the analyses in connection with my Parents' Night Program. - - The students are beginning to develop some efficiency standards, and so am I." K. L. Russell, teacher of vocational agriculture at Neosho said, "Recently while comparing project summaries, one boy insisted there was a mistake in his records; he reviewed his record book and found a \$50 error." T. V. Davis, teacher at Diamond, expressed the opinion that progress of the department from year to year in any enterprise may be measured by means of comparing achievements in terms of efficiency standards.

TABLE I—Goals and Efficiency Standards Set Up by a Student of Vocational Agriculture at Washington High School, 1945-46

Goals and Standards	Average Farmer*	Dept. Standard	My Goal	My Achievement
1. Per cent of chicks raised.....	85	93	90	94
2. Ave. wt. at 12 weeks.....	2.2	2.97	3.0	2.77
3. Feed to produce 1 lb. gain.....	5.0	4.0	4.0	4.2
4. Feed cost for 1 lb. gain.....	.18	.15	.17	.17
5. Total cost per 1 lb. gain.....	.27	.22	.27	.30
6. Price received per lb.....	.30	.34	.35	.43

\*The author suggests the use of another column, "superior farmer."

### Determining Goals and Standards Is a Learning Activity

Each of the three steps named in the opening paragraph will now be discussed in order. A part of the planning of each project is the setting down in writing of the student's goals and efficiency standards. In Missouri, the project accounting book has a page involving the headings shown in Table I.

The procedure for guiding the student in the completion of the page represented by Table I depends upon a number of factors, one of which is the student's year in vocational agriculture. With the beginning class, the teacher works first with the entire class in the setting up of goals and efficiency standards for a student who has a project common to the class. It is necessary that the class first be motivated as to the neces-

sity and the importance of having goals and standards. This can be done by asking such questions as: How many miles should you get from a gallon of gasoline in a 1941 automobile? Is 5 feet a good high jump for a boy of high school age? How many bushels of wheat per acre may be grown on average soil in this community? How many pigs should you raise from a sow? What is a good milk cow? How much feed will it take to raise 500 New Hampshire cockerels to an average weight of 3½ pounds? The discussion will bring out the fact that students have standards on some things but not on others. It should inform the student that standards may be based upon one or more of such sources as the following: class average, experiment station records, D.H.I.A. average, best achievement of a class member, achievement of superior farmers.

TABLE II. Analysis of Broiler Project of Student C at Washington High School.

	My Project	Dept. Average	Others*
1. No. of chicks at beginning.....	300		
2. No. of broilers sold and used at home.....	297		
3. Per cent of chicks raised to market age.....	99		
4. Lbs. of feed to produce 1 lb. broiler.....	4.2		
5. Cost of feed per bird.....	.52		
6. Cost of heating house per bird.....	.008		
7. Cost of chicks, each at start.....	.107		
8. All other costs per bird except labor.....	.06		
9. Labor cost per bird.....	.07		
10. Total cost per bird.....	.76		
11. No. of lbs. produced.....	1010		
12. Ave. weight per bird when sold.....	3.3		
13. Total cost per lb. of broiler.....	.22		
14. Selling price per lb. of broiler.....	.27		
15. Selling price per bird.....	.89		
16. Profit per pound.....	.05		
17. Profit per bird.....	.165		

\*"Others" refers to other students' projects, to adult farmers' records, experiment station records, and any other records which will enable the student to measure his efficiency and to make adjustments in future management of his projects.

TABLE III. A Study of Broiler Production Projects, Washington High School, 1946-47

Student's Name	No. of Chicks	Per Cent Raised	Kind of Feed	Lbs. Feed per Lb. Gain	Ave. Wt.	Total Cost of 1 Lb.	Price Rec'd	Date Sold
A .....	600	52	—	5.45	2.06	\$3.10	\$.37½	Jan. 2
B .....	300	99	—	3.08	3.02	.162	.27½	July 3
C .....	300	99	—	4.02	3.03	.220	.27	Nov. 15
D .....	400	87	—	4.68	2.10	.233	.30	April 15
E .....	200	96	—	5.45	3.06	.310	.38	Aug. 1
F .....	300	100	—	3.72	2.50	.205	.33	April 17
All Projects,								
1945-46 .....	4785	90.6	—	4.03	2.80	.224	.34	

Note: Other factors may be added to those analyzed in this table.

It is the responsibility of the teacher to provide data for the column *Average Farmer*. He may call on the state supervisory staff and/or the teacher-training staff for help in securing these data. Figures for the column, *Department Standard*, have previously been agreed upon by the teacher and members of the advanced classes. These figures are provided for members of the beginning class

count the goals the student is attempting to reach and the standards of efficiency he is attempting to achieve.

### Analyzing Projects for Efficiency Is a Learning Activity

The second step named in the opening paragraph is taken as soon as the project is completed or at the end of a year, whichever comes first. The student



Standards in milk production are developed by means of comparisons at Neosho, Missouri. Each boy's records are compiled in a table where they may be compared with records of other class members. In this school, summaries of individual milk production projects are placed on the board monthly for comparison. K. L. Russell, Instructor.

with some explanation by the teacher as to how they were arrived at. The figures for the column *My Goal* are discussed by the members of the class and particularly with the student whose project is being planned. The column *My Achievement* is not completed, of course, until the project is closed. After the class understands the purpose of the page and how it is to be used, each individual begins work on the selection of goals and standards for his own projects. The teacher passes quietly among the students, giving help and encouragement when needed. Second, third, and fourth year students do not need as much help in setting up goals and standards as the beginning students, assuming that they received training in it when they were beginners. Goals and efficiency standards, of course, should be set up before detailed plans are written for conducting the project. Plans should take into ac-

makes a financial summary of his project and analyzes it in terms of efficiency factors set up when the project was planned. For this, he uses a form provided by the teacher. In Missouri, a special form is used for each of ten major types of projects. They are: milk production and dairy heifer, sow and litter, feeder animal production, beef cow and calf, ewe and lamb, egg production, pullet production, broiler production, field crops, and miscellaneous. A special form is better than a general form for summarizing and analyzing because the items are named specifically and, therefore, have more meaning. Also, it has been found that the student is less likely to omit items of expenses and receipts when a complete listing is on the form. The student makes the summary and the analyses by himself, putting the figures in pencil, after which he asks the teacher to review the figures with him. If omissions or other mistakes are found, the student makes the changes, not the teacher. When it is completed to the satisfaction of the student and the teacher, the figures are put in ink. Two copies are made, one of which is given to the teacher for his files and the other is placed in the student's record book.

Such an analysis contains valuable teaching material that will justify discussion by the class. For example, the teacher may point out that 4.2 pounds of feed were required to produce 100 pounds of broilers, which is approximately .2 of a pound higher than the average of the department for the previous year. He might raise the question, "Why did it take more feed in this case than it did for the average?" The question may be raised as to why the cost of fuel per bird was only .8 cents, whereas the average cost of fuel per bird for the department was 2.7 cents. With the help of the owner of the project, the possible causes are discussed and the solution found.

### Comparing Project Analyses Is a Learning Activity

Unless the third step named in the opening paragraph is made, much of the teaching value in the use of goals and standards will be lost. The third step is

(Continued on Page 198)



Developing standards in sheep raising, Diamond High School. Each of the nine vertical columns on the chart contains facts about a completed ewe and lamb project. Columns on the extreme right contain average figures for all projects for the school year. This chart will be useful for future classes. T. V. Davis, Instructor.

## Studies and Investigations

E. B. KNIGHT

### Progress in research and problems

R. W. CLINE, Arizona, Member of Research Committee Agricultural Section, A. V. A.



R. W. Cline

**T**HE MAJOR problem is not one of finance but finding persons interested in doing research and qualified to do it." This statement by Dr. Byram (1) speaking on the research program at the 1947 A.V.A. Convention clearly defines the task ahead in the further development of research.

This report of highlights and observations from the discussions at the convention is written with the hope of stimulating further interest in studies as a basic part of agricultural education at all levels.

#### The Situation

The need for extensive studies on many aspects of agricultural education was never greater. Veterans' training, young farmer activities, Future Farmer programs, pre-vocational courses, guidance, farm mechanics and teacher education are some areas in which there is urgent need for further study. Cutting across all these are the problems of evaluation and program planning.

The supply of qualified personnel at present is inadequate for effective programs of research. Dr. Byram (1) reported on the situation as follows: "Out of 62 persons who received the doctoral degree 1927-1940, only 24 are now in Agricultural Teacher Training. There is a total of 34 in the United States at present, or less than one per state." Institutions of higher education, which train for leadership in the profession, are supplying only a limited number of workers in terms of needs. The increased demands for teachers of agriculture is taxing the capacity of teacher-training staffs so that limited time is available for studies toward improvement of programs.

Evaluation of the long-time effects of agricultural education has not kept pace with the needs and developments in this field. Dr. Hamlin (2) gave many reasons for this situation and why it is necessary to provide time and research for the development of procedures and techniques appropriate to education in a democracy. "We have not provided adequately for evaluation in teacher education," he stated, hence "Our teachers do not see its crucial importance." He continued, "There has been a lack of incentives to improve evaluation procedures. Teachers know there is little relationship between what they accomplish and the salaries they get." In looking at the problem

ahead he concluded, "Evaluation is complex because of the large number of people with possible conflicting interests involved, and the time required to determine outcomes."

Even though considerable work has been done on evaluation through a national study in recent years, Professor Humpherys (3) emphasized the need for further work with teachers toward systematic evaluation of outcomes in local programs. As to the value of results to be derived from basic research, he concluded that educators may well study the programs and experiences of research workers in industry.

#### Recent Progress

Growing appreciation for the value of research among members of the profession in general is gratifying. Contributions and comments by more than fifty workers in attendance at the research session in Los Angeles is indicative of the trend. Studies in agricultural education are finding a place in educational literature. The findings of studies are being disseminated through publications of a number of agencies such as, State Departments of Education, Bureaus of Educational Research, Colleges and Experiment Stations, Educational Organizations and Teacher Education Departments. Summaries of 837 studies completed prior to 1940 are available in printed form.

In a recent number of *The Review of Educational Research*, Professor Martin (4) presented a review of studies completed since 1940 and made interpretations of findings as they apply to the major aspects of the program in agricultural education. The work is documented with 66 of the more significant studies. Special reports on research along with popular articles have been effective in bringing the findings of studies to members of the profession with a minimum of delay. Professor Sutherland's (5) article, "Why Did They Leave?" published in the *A.V.A. Journal*, and Dr. Fife's (6) report on *State F.F.A. Programs of Work* are examples of other effective ways of reporting studies.

There is a slow but steady increase in the number of workers engaged in conducting studies; largely on a part-time basis. At least three states now have full-time research specialists. We may expect others to be added to state staffs as a more adequate supply of trained personnel becomes available.

State, regional and national programs of research are improving. Among these activities, largely at the state level, is the encouraging trend toward teacher participation, especially in cooperative studies.

From a beginning through the medium of regional conferences in past years, Regional Research Committees now have definite long-time programs which include a broad range of activities. The nature of such programs is indicated by the following excerpts from the Report of the Research Committee of the Pacific Region: (7)

The program of the Committee includes the following activities:

1. Compilation of an annual list of studies completed in the region during the year.
2. Exhibit of copies of studies at regional conferences and distribution of same to states in the region wherever feasible.
3. Reports of significant findings from studies, on the regional conference program.
4. Maintenance of an up-to-date list of studies in progress in the states of the region.
5. Development of an annual list of problems planned for future study in the states of the region. (This list is planned in cooperation with the Teacher Training Committee for the region.)

The outstanding event in the regions during recent years was the research conferences organized and conducted through the assistance of the United States Office of Education last year. These meetings, which were held in the North Central and North Atlantic Regions, have doubtless set the pattern for a new type of training experience for all who are interested in research. Since published reports on these conferences are available, it is sufficient here to quote from Dr. Olney's (8) report on the North Atlantic Conference. He states in part, "Every person in attendance at the conference had a place on the program in presenting or outlining possible problems for study. At the close of the conference, three definite areas were suggested for further clarification as bases for regional studies." In conclusion he states, "Our initial attempt in holding a regional research conference was most gratifying in the results accomplished and the stimulating effects which it no doubt has had upon the states and the individuals participating in it."

The most recent development in research activities at the national level was the expansion of the A.V.A. program through the addition of a full-time Director of Research and Publications. This program, which includes both research and cooperative studies and publications, is organized to serve all phases of vocational education. In speaking before the Research session at the A.V.A. Convention in Los Angeles, Dr. Wright (9), Director of Research and Publications, outlined the program as follows:

"The program of research and cooperative study is envisioned as including several functions, namely, (1) funda-



mental research by the A.V.A. Committee on Research and Publications itself through the research director, (2) cooperation with A.V.A. sectional research committees, (3) coordination of research activities among the states, (4) encouragement and support of research programs within the states, (5) understanding of and assistance on research projects conducted by individuals, and (6) cooperation in research activities with other educational agencies."

One of the major contributions of the enlarged program may well be the development of cooperative research activities and the exchange of information on studies with other educational agencies. Such activities planned and conducted in cooperation with research services of the United States Office of Education would serve as a counseling center for research groups and a clearing house for studies.

Further discussion of this enlarged service as outlined by Dr. Wright does not properly come within the scope of this report. The new program is most significant for further development and stabilization of long-range research. It also indicates a new appreciation for research among people in vocational education in that they are willing to support this service with funds derived from membership in a voluntary professional organization.

### What Next?

As a basic concept for future activities, I would reemphasize the need for broad interests in research among members of the profession, along with an adequate supply of personnel qualified to do the job. While this approach implies increased participation in studies by workers at all levels of the educational program, it also demands overall leadership and coordination by state, regional and national groups. Such groups are already functioning with varying degrees of success. Our major concern is to expand and upgrade present performance. In this connection a look at some plans and projects of national research groups for the immediate future will indicate the nature and trend of activities.

Dr. Wright (8) reported that two major long-time research projects are planned by the A.V.A. for 1948 and 1949 as follows: "The Validity of State Certification Requirements for Vocational Teachers." This study involves an analysis of teacher curricula as well as actual certification requirements. The other study will deal with "Work Experience as a Means of Education." In this investigation work experience on the part of the student, the teacher, the employer and the school administrator will be analyzed.

The Research Committee, Agricultural Section, of the A.V.A. deals with the general development and promotion of studies in this field. The following is a partial list of plans and recommendations for 1948: (10)

1. Complete plans and publish the summaries of studies in Agricultural Education. Arrange if possible for this work to be published and distributed as a bulletin of the United States Office of Education.
2. Continue regional research confer-

## Summary of the 1947 Research Conference North Central Region

MIL0 J. PETERSON, Teacher Education, University of Minnesota



Milo J. Peterson

RESEARCH is the lifeblood of any forward-looking program of agricultural education; the dynamic nature of the subject matter as well as the learning-teaching situation serve to emphasize this basic fact. There is a continuous need for new facts and new scientific appraisals of methods and results. Professional growth and development of the teachers, the teacher-trainers, and the supervisors is dependent upon research for the stimulation necessary to a sound and healthy program in agricultural education.

ences similar to the meetings held in two regions last year and expand this activity by conducting conferences in the Pacific and Southern Regions.

3. Compile by states a list of workers engaged in research in Agricultural Education.
4. It is recommended that chairmen of regional committees make reports to members of the Research Committee, Agricultural Section of the A.V.A., on research programs and activities in the regions.
5. It is recommended that the services of a research specialist in Agricultural Education be made available in the United States Office of Education to assist in the further development of research programs at state, regional and national levels.

1. Byram, H. M. "Research Programs at the State Level." Address before the Agricultural Section, A.V.A. Convention, Los Angeles, Calif., Dec. 15, 1947.
2. Hamlin, H. M. "What Next in Evaluation? Address before the Agricultural Section, A.V.A. Convention, Los Angeles, Calif., Dec. 15, 1947.
3. Humpherys, L. R. "Implementing the Evaluation Studies." Address before the Agricultural Section, A.V.A. Convention, Los Angeles, Calif., Dec. 15, 1947.
4. Martin, W. H. "Agricultural Education." *Review of Educational Research*, June, 1947 Vol. XVII, No. 3, pp. 240-250.
5. Sutherland, S. S. "Why Did They Leave?" *Former Vocational Agriculture Teachers Give Reasons for Changing Jobs.* *A.V.A. Journal*, Mar., 1946, Vol. 21, No. 3, p. 20.
6. Fife, Ray. *A Study of State F.F.A. Programs of Work*, Department of Agricultural Education Mimeo., May, 1947, p. 22.
7. Cline, R. W. "Report of the Research Committee of the Pacific Region," a report to the Agricultural Section of the A.V.A. Convention, Los Angeles, Calif., Dec. 15, 1947.
8. Olney, Roy A. "Research in the North Atlantic Region," a report to the Agricultural Section, A.V.A. Convention, Los Angeles, Calif., Dec. 15, 1947.
9. Wright, Carlton E. "The Research Program of the A.V.A." Address presented before the Agricultural Section, A.V.A. Convention, Los Angeles, Calif., Dec. 15, 1947.
10. "Report of the Research Committee," Agricultural Education Section, A.V.A. Convention, Los Angeles, Calif., Dec. 18, 1947. Roy A. Olney, acting representative for North Atlantic Region.  
H. M. Byram, acting representative for North Central Region.  
M. C. Garr, acting representative for Southern Region.  
R. W. Cline, representing Pacific Region, acting Chairman.

In recognition of the above statements a group of research workers from the North Central Region gathered at the University of Chicago last August to make an appraisal of the present situation of research in agricultural education, develop a list of problems classified according to need and level of attack, and lay plans for further work during the year ahead on a coordinated basis. Professor H. M. Hamlin, of Illinois, acted as chairman of the group and efficiently guided the conference to a successful conclusion.

No formal agenda had been prepared in advance. Participants started from where they were, set the goals, and worked toward the objectives in an atmosphere of professional development similar to that found in the best adult education classes. Representatives of the various states started the ball rolling by presenting a thumbnail sketch of the research program as it functioned in their agricultural education activities. In some cases this amounted to a review of work under way. In others the administrative and organizational angles were stressed so that, on balance, a rather complete profile of research work in the North Central Region emerged from the initial session of the conference.

The second section of the conference was devoted to the development of an array of problems that needed study. These were developed from the work currently under way as well as from problem areas that have not yet been attacked. Criteria used in selecting the studies were (1) need, (2) feasibility, and (3) extent to which the problem was of general interest. A list of the recommended studies is given below.

### Recommended Studies

1. What patterns are most desirable for advisory councils
2. Functions and techniques of state supervision
3. Improved working relationships with school administrators
4. Procedures and practices of F.F.A. subsidiaries
5. Time studies—  
(a) Experimental study  
(b) Time requirements
6. Apprenticeship in teacher preparation
7. Teacher selection
8. Developing a permanent program for young and adult farmers
9. Education for farm-family living relationships
10. Use of F.F.A. Foundation funds and other funds in stimulating programs
11. In-service needs and facilities for meeting such needs
12. Curriculum construction guides
13. Guidance
14. Experimental appraisal of methods of teaching
15. Increasing the educational value of judging contests

In order that the matter of coordination of research in the region be more fully explored, a clearing committee was appointed with instructions to report on the following day. This committee gave

(Continued on Page 198)

# Farm Mechanics

R. W. CLINE

## Education—the key to improved use of electricity on the farm

H. H. LONDON, Professor Industrial Education, University of Missouri and R. W. Adams, Director Demonstration School, North Texas State College

PRIOR to 1820 America was an agrarian nation. Most of the people lived under similar conditions on farms and in small villages. Then began the industrial revolution, through which inanimate power and machinery were substituted for the muscles of men and beast. As this great force, born of science and invention, swept on with increasing momentum, millions of people left the farms with their long hours of toil and simple living for the bright lights and comforts of the cities which sprang into being across the continent, there to work as wage earners at specialized tasks for large corporations.

Those who remained on the farm came, in time, to take advantage of the many inventions designed to lighten the burden of the farmer and to make his work more efficient. Chief among these was electricity with its many applications. Today, power lines are spread like a vast spider web over rural America, bringing modern conveniences, relief from drudgery and more efficient operation to hundreds of thousands of farm homes. But the job of electrifying the rural homes of the nation is by no means complete. Neither has effective use been made of electricity by many farm families who now have this service.

Improved use of electricity on the farm involves, in some places at least, additional lines and appliances, more adequate and regular current supply, and the training of workmen for the better installation and care of equipment. The crux of the matter, however, seems to be the education of farm families themselves in the use of electricity—what it can do for them, how to select and install equipment, and how to operate and care for it. This is the problem that confronts the REA Cooperatives throughout the country in their efforts to expand and improve their services. It is likewise a major problem for the many educational agencies, including vocational agriculture, which are at work to raise the standard of living among rural people.

The writers became interested in the problem while working with the REA Cooperatives in Missouri on a foreman-training program. Since very little seemed to be known as to the specific educational needs and interests of farm families with respect to the use of electricity, it was decided to make a study of these needs and interests. In the study, facts and opinions were sought from 2,085 operators of electrified farms and from more than 700 professional workers, including (1) managers of electric co-ops, (2) county agents, (3) home

demonstration agents, (4) teachers of vocational agriculture, (5) teachers of vocational home economics, and (6) shop teachers of industrial arts.

### Need for a Greater Knowledge of Electricity

The six groups of professional workers were asked questions dealing with the benefits now obtained by farm families from the use of electricity and the possibility and desirability of improving these through education. These questions and the replies follow:

QUESTION 1. "Do you believe that most residents of electrified farms are obtaining the maximum benefits possible in their situation from the use of electricity on their farms?"

Replies	Per Cent	
	Yes	No
Co-op managers .....	100	0
County agents .....	100	0
Teachers of vocational agriculture .....	99	1
Teachers of vocational home economics .....	99	1
Home demonstration agents .....	96	4
Industrial arts shop teachers .....	96	4

QUESTION 2. "Do you believe that most residents of electrified farms would utilize electricity more effectively if they knew more about electrical equipment and its possible uses on the farm?"

Replies:	Per Cent	
	Yes	No
Co-op managers .....	100	0
County agents .....	100	0
Teachers of vocational agriculture .....	99	1
Teachers of vocational home economics .....	99	1
Home demonstration agents .....	96	4
Industrial arts shop teachers .....	96	4

QUESTION 3. "Do you believe that it would be desirable if more were done in your community or service area to assist rural residents in learning more about the use of electricity on farms?"

Replies:	Per Cent	
	Yes	No
Co-op managers .....	100	0
County agents .....	100	0
Home demonstration agents .....	100	0
Teachers of vocational agriculture .....	99	1
Teachers of vocational home economics .....	98	2
Industrial arts shop teachers .....	98	2

### Do Farm Families Want to Learn About Electricity?

Regardless of how desirable it may seem for farm people to learn more about the use of electricity, it was realized that little can be done about it un-



Rural electrification has made possible the modernization of kitchens in rural homes. Photo Rural Electrification Administration.

less these people are interested in learning. To find out the extent of their interests, farm operators were asked the following questions:

QUESTION 1. "Would you, as operator of an electrified farm, wish to learn more about electricity and electrical equipment if you could do this in a way that was convenient and inexpensive?"

RESPONSES: Yes—65 per cent; No—5 per cent; No response—29 per cent.

QUESTION 2. "Would your wife wish to learn more about electricity and electrical equipment if she could do this in a way that was convenient and inexpensive?"

RESPONSES: Yes—63 per cent; No—8 per cent; No response—29 per cent.

QUESTION 3. "Would you wish your son (if you have one) to learn more about electricity and electrical equipment if he could do this as a part of his high school work?"

RESPONSES: Yes—46 per cent; No—1 per cent; No response, 53 per cent.\*

QUESTION 4. "Would you wish your daughter (if you have one) to learn more about electricity and electrical equipment if she could do this as a part of her high school work?"

RESPONSES: Yes—41 per cent; No—3 per cent; No response—56 per cent.\*

### What Farm Families Should Know About Electricity

Both farm operators and professional workers were asked to indicate what they believed *men, women, boys, and girls* living on electrified farms should know about electricity. There were some differences of opinion between the farm operators and professional workers regarding the nature and extent of these needs. A majority of both groups, however, believed that co-op members should know the following things about electricity and electrical equipment.

In planning an educational program to meet the needs indicated in the accompanying statements, it is necessary to know also what items of electrical equipment are possessed by farm families. Accordingly, below are summarized facts obtained in this study concerning the nature and extent of the electrical equipment in use on Missouri farms in 1947.

\*It is most probable that many of these respondents had no sons or daughters of high school age.

## HOW TO:

Girls Women Boys Men

1. Select and purchase household electrical equipment.....	*	*	*	*
2. Operate and care for household electrical equipment.....	*	*	*	*
3. Estimate the cost of operating household electrical equipment.....	*	*	*	*
4. Read a meter and figure a monthly electricity bill.....	*	*	*	*
5. Avoid overloading circuits and blowing fuses.....	*	*	*	*
6. Select and replace fuses.....	*	*	*	*
7. Plan the lighting of a room or building.....	*	*	*	*
8. Make simple repairs on household electrical equipment.....	*	*	*	*
9. Locate and eliminate the causes of blown fuses.....	*	*	*	*
10. Determine whether or not it would be profitable to buy electrical equipment.....	*	*	*	*
11. Plan the wiring of a building.....	*	*	*	*
12. Select and purchase non-household electrical equipment.....	*	*	*	*
13. Operate and care for non-household electrical equipment.....	*	*	*	*
14. Estimate the cost of operating non-household electrical equipment.....	*	*	*	*
15. Make simple repairs on non-household electrical equipment.....	*	*	*	*
16. Change hand-operated machines to electrically-operated machines.....	*	*	*	*
17. Rig-up a portable motor.....	*	*	*	*
18. Install new lighting or convenience outlets and switches.....	*	*	*	*
19. Install a new circuit in a building.....	*	*	*	*
20. Wire a building for electricity.....	*	*	*	*
21. Do special wiring required in installing electrical equipment.....	*	*	*	*
22. Make major repairs and adjustments on electrical equipment.....	*	*	*	*

It should be noted that neither the farmers nor any of the professional workers were of the opinion that farm operators should make major repairs and adjustments on electrical equipment. This work should be left to technically trained service men in the trade.

### Electrical Equipment in Use on Missouri Farms

*Buildings wired for electricity.* The ten farm buildings most frequently wired for electricity and the per cent of farmers who reported each are as follows:

	Per Cent
House .....	99
Barn .....	48
Brooder house .....	30
Chicken house .....	28
Smoke house .....	24
Garage .....	23
Work shop .....	18
Dairy barn .....	14
Granary .....	8
Cellar .....	4

More than 90 per cent of all buildings wired were included in this list of ten.

*Household electrical equipment.* The leading items of household electrical equipment possessed by farm families and the per cent of farmers who reported possession of each are as follows:

	Per Cent
Electric iron .....	96
Radio .....	92
Lamps .....	77
Washing machine .....	68
Refrigerator .....	58
Toaster .....	51
Vacuum cleaner .....	37
Electric fan .....	36
Heating pad .....	32
Range .....	18
Coffee maker .....	15
Water heater .....	8

This list of twelve items includes more than 95 per cent of all household electrical equipment possessed by farm operators in Missouri.

### Non-Household Equipment

*Non-household electrical equipment.* The principal items of non-household electrical equipment used on Missouri farms, together with the per cent of farmers who reported possession of each

item are as follows:

	Per Cent
Yard light .....	55
Water pump .....	30
Chicken brooder .....	21
Portable motor .....	13
Electric fence .....	12
Tool grinder .....	12
Milking machine .....	4
Milk cooler .....	4
Feed grinder .....	3
Cream separator .....	3
Soldering iron .....	2
Dairy water heater .....	1

Of all the items of non-household equipment reported, more than 94 per cent are included in the above twelve categories.

### Ways to Do the Job

The professional workers consulted in this study were asked to indicate what they believed to be desirable ways of assisting farm people to learn more about the possibilities and uses of electricity. Many ways were suggested, but a majority favored these means:

#### For Farm Men and Women

1. Include instruction dealing with the use of electricity on the farm in the regular educational programs of agencies now serving rural communi-

ties. (County agent, home demonstration agent, teachers and others.)

2. Conduct short courses dealing with the use of electricity on the farm for residents of electrified farms in the community.
3. Distribute educational literature dealing with the use of electricity on farms to residents of electrified farms in the community.

#### For Farm Boys

1. Include instruction dealing with electricity on the farm in agriculture courses in high school.
2. Include instruction dealing with the use of electricity on farms in programs of such rural youth organizations as 4-H Clubs and the Future Farmers of America.
3. Include instruction dealing with electricity on the farm in high school science courses.
4. Include instruction dealing with electricity on the farm in industrial arts shop courses in high school.

#### For Farm Girls

1. Include instruction dealing with electricity on the farm in home economics courses in high school.
2. Include instruction dealing with electricity on the farm in high school science courses.
3. Include instruction dealing with electricity on the farm in the programs of such rural youth organizations as 4-H Clubs, and the Future Homemakers of America.

### A Challenge to the Teacher of Vocational Agriculture

If the information presented here is fairly representative of the situation in regard to education for rural electrification over the nation, then there is certainly a big job to be done, a job that if properly done should yield great dividends in safety, convenience, and profit to farm families. The teacher of vocational agriculture, occupying the strategically important position that he does in farm communities, has here both an opportunity and a responsibility. But to do his share of the job, he must be well informed himself about electricity and its uses. In many cases this may mean additional training on his part, and the re-organization of his courses of study to make room for greater emphasis on electricity in day and evening classes.



Electric units make possible the rapid cooling of milk on dairy farms. Photo Rural Electrification Administration.



## Summary Regional Research Conference

(Continued from Page 195)

consideration to the problem of coordination on the basis of types of problems suited to a regional approach, methods of disseminating information among the various states in the region, and the development of machinery to provide for effective exchange of progress reports. Five specific recommendations were made to the group by this committee as a beginning in the important factor of effective coordination in research activities. These recommendations are listed below and were prefaced by general agreement that at the present time co-ordinated research activities in the Region are conspicuous by their absence.

### Recommendations of the Clearing Committee

1. The chairman of the regional committee on research should send lists of subjects suggested for study to members of the research committee in each state in the region. Included should be the list prepared at this conference plus those subjects suggested by other regions or state groups. The names of supervisors and teacher-trainers who are interested should be added to the names of committee members for each study.
2. Subjects selected for study should be reported periodically by the chairman of the research committee in each state to the chairman of the regional committee on research.
3. Lists of subjects selected for study should be sent periodically to the members of the research committee by the chairman of such committees.
4. The chairman of the research committee in each state should send a minimum of two copies of summaries of each completed study to all supervisory and teacher-training offices in the region (If printed or mimeographed summaries cannot be prepared, a report of approximately one page double-spaced, such as is used in "Summary of Studies," should be sent.)
5. In order to provide for the planning and development of cooperative studies involving two or more states in the region, a clearing committee of about three persons should be given the responsibility for encouraging the execution of such studies.

### Suggestions from Dr. Tyler

Professor H. M. Hamlin, general chairman of the research conference, made arrangements with Dr. Ralph Tyler of the University of Chicago faculty, to attend an afternoon session and review some of the significant developments in the field of social science research. According to Dr. Tyler, emphasis in evaluation during the last fifteen years has been on the development of new instruments to measure the less tangible objectives of educational programs. Attention has been given to observation and interviews as aids in measuring interests, attitudes, and problem solving abilities. Adults will not devote much time to paper and pencil tests which has stimulated, in addition to the previous techniques, further work in sampling. Dr. Tyler maintained that if proper sam-

The Editing-Managing Board of the *Agricultural Education Magazine* has found it necessary to increase the subscription rate as of June 1, 1948, to \$1.50, for renewals and new subscriptions. The increase is a minimum estimate of the amount required to meet the current costs of publishing. The new rate for college students majoring in agricultural education will be \$0.75 for a twelve months subscription.—W. H. Martin, Business Manager.

pling procedures were used the responses from ten people in one-half hour will be equivalent to those obtained from one person in five hours.

Dr. Tyler suggested that there are two levels at which the attainment of such objectives as the ability to cooperate effectively can be measured. One level, representing the ultimate goal, might be measured by ratings; the other level of measurement would involve observation to note whether activities and experiences are provided which might result in achievement of the ultimate goal. This type of intangible (ability to cooperate effectively) is undoubtedly one which should be attacked at both levels.

In regard to a question on the evaluation of student teaching, Dr. Tyler indicated that research might profitably be directed toward the question of what objectives may be attained to best advantage in student teaching and in resident instruction.

### Looking Ahead in the Region

While it was recognized that the group present at the conference had made a beginning, it was also obvious that this activity should be of a continuing nature for best results. Accordingly, Professor Ray Fife, chairman of the supervisors and teacher-trainers in the region, named a committee to plan the Regional Research Conference for 1948. It was the consensus of opinion that the committee should solicit suggestions regarding such matters as the nature of the conference or workshop, and the length of program. It was further suggested that the committee prepare an agenda, but that the group should be free to set up its own program on the basis of current needs.

In retrospect it appears that research workers in the North Central Region are confronted with a multiplicity of problems, many of which can best be solved through the regional approach. While it is granted that difficulties lie in wait for this type of research procedure, there seems to be no question that the advantages outweigh the disadvantages which seem to be largely administrative.

To Professor Hamlin, the University of Chicago, and the U. S. Office of Education, represented by Dr. H. B. Swanson, the North Central Region owes its thanks for things accomplished and goals determined as guides for future progress. In the last analysis it is the research program that provides stimulus for the future, balance for the imagination, and a proving ground for sound thinking on which agricultural education depends for growth.

## Learning through goals and efficiency standards

(Continued from Page 193)

the comparison of all the production projects of the same type conducted during the school year. This is when the records are put under the microscope, so to speak. The teacher makes a large chart of all the project data, on paper or sign cloth, for permanent reference. The class or the group having broiler projects, depending on the size of the two, studies the chart. Table III represents a chart actually used in the department of vocational agriculture at Washington.

A study of the above table presents many opportunities for effective teaching. An examination of the table may bring out the following questions:

1. Why did student D raise only 87 per cent of his broilers?
2. How could student B produce a pound of broiler on only 3.08 pounds of feed, while students A and D used 5.45 pounds of feed and student C used 4.02 pounds?
3. Why did student E receive 38 cents a pound for his broilers, whereas student C received only 27 cents a pound?
4. Why did student E start with only 200 chicks? What is an economic unit for broilers?

The study of material similar to that in Table III offers opportunities to develop in the student desirable attitudes, ideals, appreciations, standards, and other attributes, in addition to the acquisition of knowledge. The student will receive practice in solving real problems, which is better than memorizing material from books or bulletins. He will develop the habit of analyzing situations carefully before acting. The keeping of accurate accounts, which must accompany the development of goals and standards, will become an ideal and may develop into a habit.

### Learn Importance of Efficiency

By analyzing and comparing projects conducted by their classmates, students learn the importance of efficiency. They learn to develop standards for measuring the performance of livestock and of crops. They learn to know what a good cow is, to know when broilers produce efficiently, to appreciate the value of fertilizer, to know what an economic unit is. More errors in project accounting will be discovered. New practices may be uncovered and costly practices will be brought to light. The students will make these discoveries for themselves.

How much time should be devoted to setting up of goals and to the analyzing of records? There is no objective method of determining the answer to this question. Many Missouri teachers, in budgeting their class time for the school year, allocate about 30 to 36 class meetings for individualized study of farming programs. In addition to this time, they frequently use farming records as source material in teaching. Whatever time is necessary to get the job done can be justified, for there is no more effective teaching than that involving individualized and class study of real problems.

Members of the Minerva, Ohio, F.F.A. chapter have set out 41,500 trees for reforestation purposes during the past two years.

